

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 5-20 are presently active in this case. The present Amendment amends Claim 5 without introducing any new matter.

Claims 5-20 were rejected under 35 U.S.C. §103(a) as unpatentable over Starkey et al. (U.S. Patent No. 5,428,555, herein "Starkey") in view of Roseman (U.S. Patent No. 5,038,318).

In response to the rejection of Claims 5-20, Applicants respectfully traverse the rejection. However, in the spirit of moving prosecution forward of the present Application, independent Claim 5 is amended to recite a feature of dependent Claim 7. Applicants reserve the right to present Claim 5, or similar claims, in a continuation application and to address any traversed issues in such application.

In response to the rejection of Claims 5-20 under 35 U.S.C. §103(a), Applicants respectfully request reconsideration of this rejection and traverse the rejection, as discussed next.

Briefly recapitulating, Applicants' invention, as recited in Claim 5, relates to a system including: at least one automaton that is provided with a data-exchange function, the at least one automaton further connected to sensors or actuators; a communication line; and a microcomputer connected to communicate with the at least one automaton through the communication line, which is connected to a microcomputer input, the microcomputer includes an automaton interface driver, an operating system, and a spreadsheet program, wherein the automaton interface driver cooperates with the operating system to provide commands from the spreadsheet program and to receive data from the at least one automaton through the communication line and microcomputer input, and the *automaton interface*

driver emulates the proprietary language of the at least one automaton and wherein the spreadsheet program sends commands to the automaton interface driver.

As explained in Applicants' Specification, the present invention improves the supervising and driving of automatons connected to a microcomputer, since the automaton interface driver can emulate the proprietary language of the automatons for easy control of the automatons by a standard spreadsheet program.¹

Turning now to the applied references, Starkey discloses an interactive computer controlled management system for real-time data gathering and analysis of process information relating to a plurality of data sources and for controlling process functions of the data sources. However, and as acknowledged by the outstanding Office Action,² Starkey fails to disclose certain features of Applicants' Claim 5. In particular, Starkey fails to disclose an automaton interface driver that cooperates with an operating system and emulates the proprietary language of the at least one automaton, as newly recited in Claim 5. Starkey discloses that the host CPU includes off-the-shelf software packages such as a spread-sheet program and a graphic display program that can be used to create a series of user-defined screen displays.³ With the software running on Starkey's CPU, customized graphic displays tailored to show various information can be easily created to facilitate the monitoring of the process by a user.⁴ Accordingly, a user-defined screen display, as taught by Starkey, *is not* an automaton interface driver that emulates the proprietary language of the at least one automaton.

The outstanding Office Action purposes to modify Starkey by incorporating certain features from Roseman and that it would have been obvious to make such a modification. Specifically, the outstanding Office Action rejects Applicants' Claims 5-20 based on the

¹ See Applicants' Specification in the Abstract.

² See outstanding Office Action at page 4, lines 6-7.

³ See Starkey, at column 6, lines 48-54 and in corresponding Figure 2A.

⁴ See Starkey, at column 6, lines 54-58.

proposition that it would have been obvious to modify Starkey by importing Roseman's automaton interface driver that allegedly cooperates with the operating system to provide commands from the spreadsheet program and that the automaton interface driver further emulates the proprietary language of the at least one automaton.⁵ Applicants respectfully submit, however, that Roseman fails to disclose an automaton interface driver that cooperates with an operating system and that emulates the proprietary language of the at least one automaton, as next discussed.

In rejecting Applicants' claims, the outstanding Office Action relies upon Roseman at column 2, line 61 to column 3, line 1. Roseman discloses in this passage that the user provides a circuit card interface in the PC for connection with the programmable logic controllers (PLC) and that the user writes a device driver program for the PC that facilitates the operation system of the PC (OS) to communicate with the circuit card interface. In other words, Roseman teaches that an interface card has to be installed in a PC with dedicated software, so that the OS is able to work with the interface card. Therefore, an appropriate driver for the interface card has to be provided. However, Claim 5 recites that the automaton interface driver *emulates the proprietary language of the at least one automaton*.

Applicants respectfully submit that Roseman's device driver program only supports the interface card, and does not provide any software support for the PLCs. Accordingly, the claimed automation interface driver does not read on Roseman's device driver program for a PC interface card.

Applicants' automation interface driver is not a mere driver for the hardware installed in a PC, but is a driver that emulates proprietary languages of at least one automaton. The at least one automaton is further provided with a data-exchange function, said at least one automaton connected to sensors or an actuators. Roseman's device driver program only

⁵ See outstanding Office Action from page 3, line 19 to page 4, line 5.

provides the PC with the required tools to exchange information between the operating system and the card interface. Roseman is entirely silent on proprietary languages of its PLCs. Therefore, a device driver for an interface card in a PC, as taught by Roseman, *is not* an automaton interface driver that emulates the proprietary language of the at least one automaton, as claimed by Applicants.

Therefore, even if the combination of Starkey and Roseman is assumed to be proper, the combination fails to teach every element of the claimed invention. Accordingly, Applicants respectfully traverse, and request reconsideration of, the rejection of Claims 5-20 based on these patents.⁶

The present amendment is submitted in accordance with the provisions of 37 C.F.R. §1.116, which after Final Rejection permits entry of amendments placing the claims in better form for consideration on appeal. As the present amendment is believed to overcome outstanding rejections under 35 U.S.C. §103(a), the present Amendment places the application in better form for consideration on appeal. In addition, the present Amendment is not believed to raise new issues because the changes to Claim 5 merely recite features previously introduced in Claim 7. It is therefore respectfully requested that 37 C.F.R. §1.116 be liberally construed, and that the present amendment be entered.

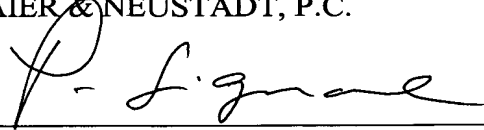
Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 5-20 is earnestly solicited.

⁶ See MPEP 2142 stating, as one of the three "basic criteria [that] must be met" in order to establish a *prima facie* case of obviousness, that "the prior art reference (or references when combined) must teach or suggest all the claim limitations," (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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